WORLD INTELLECTUAL PROPERTY ORGANIZATA International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7:
A61K 39/395

A1

(11) International Publication Number: WO 00/48632
(43) International Publication Date: 24 August 2000 (24.08.00)

(21) International Application Number: PCT/US00/03878
(22) International Filing Date: 15 February 2000 (15.02.00)

(30) Priority Data:

16 February 1999 (16.02.99) US

(71) Applicant (for all designated States except US): RUT-GERS, THE STATE UNIVERSITY OF NEW JERSEY [US/US]; ASB, Annex 11, 58 Bevier Road, Piscataway, NJ 08854-8010 (US).

(72) Inventors; and

60/120,128

(75) Inventors/Applicants (for US only): YURKOW, Edward, J. [US/US]; 8 Skyview Terrace, Clifton, NJ 07013 (US). MERMELSTEIN, Fred, H. [US/US]; 123 Woods Road, Hillsborough, NJ 08876 (US).

(74) Agents: LICATA, Jane, Massey et al.; Law Offices of Jane Massey Licata, 66 E. Main Street, Marlton, NJ 08053 (US). (81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TI, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published

With international search report.

Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(54) Title: NOVEL REDOX CLAMPING AGENTS AND USES THEREOF

(57) Abstract

Redox clamping agents which maintain cells in a selected redox state are provided. Also provided are methods of using the redox clamping agents to sensitize cells to chemotherapeutic agents such as antineoplastics, to inhibit hyperproliferation of cells and to stabilize the redox state of cells with abnormal fluctuations in their redox state.

MODIFIED TO THE TOTAL TOTAL